1. Phonology

Phonology is the part of grammar on which I have spent least time. I can therefore only give a rough sketch and leave a closer investigation to somebody who is more addicted to sounds.

1.1. Consonants

Table 1: Consonant phonemes

	bilabial	postalveolar	alveo-palatal	velar	glottal
stops: -voiced	p ph	t th	c ch	k kh	(?)
+voiced	b bh	d dh	j jh	g	
nasals	m	n		ŋ	
fricatives		s			h
continuants		l r (rh)			
glides	w		y		

Only phonemes of native words are listed in the consonant table. A characteristic, which holds for Kiranti languages and the area in general, is the lack of fricatives except for s and h.

Voiced consonants
are rare in initial position (cf. glossary). In medial position of verbs, voiced consonants are conditioned variants, e.g. /hap/+ /e/ -> *habe* 'wept' (cf. section 1.3). **d** is usually (but not neccessarily) pronounced as a flapped post-alveolar **r** in this position, e.g. *khade* [khare].

Minimal pairs for the opposition voiced : unvoiced are hard to come by; the clearest case is *cha* 'child' : *jha* 'younger sibling' (though *jha* does not occur without a prefix; cf. p. 86). *jha* is in free variation with *ja*, which as a lexeme contrasts with *ca* 'also'. Another near minimal pair is *wa-ci* 'chickens' : *wa-jilet* 'chicken (diminutive)'

Aspiration is phonemic in initial position:

pimma	run away	*phimma*	squeeze
tama	come	*thama*	descend
kopma	stand up	*khopma*	touch
ca	also	*cha*	child

Voiced consonant + **h**, realized as breathy voice, is often optional:

an-ja / an-jha	my younger sibling
am-bu / am-bhu	my elder brother
wa-din / wa-dhin	(chicken) egg

I found aspirated **r** only in one lexeme (*rhekma* 'tie'), but **rh** occurs as the result of contraction in the compound verb with V2 *-hare*: *masa-hare* -> *masarhe* 'it was lost' (cf. 2.7.1).

Unreleased stops

In syllable-final position **p, t, k** are unreleased. It is sometimes difficult to determine the character of the consonant and to distinguish it from a glottal stop, e.g. [khap˺ma ~ kha?ma] (< khat + ma) 'go'. Cf. the following variants in my notation and/or in the Linguistic Survey of Nepal materials: *kakwa / ka?wa* 'crow', *sarukwa / saru?wa* 'bone', *nakwajik / na?wajik* 'brain'. The word for 'stone' is alternatively spelt *liŋge?wa, luŋgewa, liŋgo?wa, liŋgokwa* in the LSN questionnaires (cf. (19), p. 93).

Geminated consonants

are found i) in verbs with stem-final **tt** (*latt-e* 'it is finished') and ii) as the result of assimilation to the infinitival suffix *-ma*: pap(t)- + ma -> *pamma* 'scratch'. No opposition **tt : t** arises, as stem-final **t** is voiced before vowels and stem-final **tt** is reduced before consonants. Assimilation in infinitives may sometimes result in minimal pairs. These are of little functional load; infinitives are often ambiguous due to both assimilation and elision of stem-final consonants (cf. verb list in Appendix B).

pimma (pind-)	run away	*pima* (pid-)	give
wamma (wamd-)	scratch	*wama* (was-)	arise (feeling)

but no opposition:

wamma (wamd-)	scratch	*wamma* (wan-)	shake
imma (in-)	buy	*imma* (ims-)	sleep

A third geminated consonant **dd** was found only in the series *khodde* 'like what, how', *gadde* 'like', *naddena* 'one like this', *tyaddena* 'one like that'.

1.2. Vowels

Table 2: Vowel phonemes

	front		back
close	i		u
	e		o
open		a	

There are numerous examples for the phonemic opposition of the five vowels, e.g.:

mepma	make	*mupma*	blow (fire)
mapma	speak	*mipma*	think
makma	blacken	*mukma*	ring
		mokma	boil (water)
nakma	ask for, beg	*nekma*	rub on
		nokma	return, give back

Vowels are somewhat lengthened in open root syllables. No minimal pairs based on vowel length were found.

i can sometimes be realized as **e**, especially between nasals, e.g. *khimima ~ khimema* 'cloud', *lem-**ni**-nna ~ lem-**ne**-nna* 'I will not beat you', and before the plural nominalizer *-ga*: *Sanaŋgo-**i*** 'in Sanango', *Sanaŋgo-**e**-ga* 'the people from Sanango'.

Diphthongs

Diphthongs are marginal in Athpare. **ai** occurs in a few words, but sometimes it is in free variation with **oi**, e.g. *saiba* 'friend', *waina ~ woina* 'is not'. **ui** was found only in ***u-i**-cha* 'her/his child' (cf. 3.1). **a** + **u** yields **o**: *ca* + *u* → *co* 'eats it'.

1.3. Syllable structure and phonotactics

Syllable structure plays an important part in Athpare inflection. The negation marker *-n(i)* for example does not have a fixed position, but is inserted where it makes a 'good syllable' (cf. 2.3.6.1): *khat-**ni**-ŋ-na* (go-NEG-1s-NML) 'I shall not go', *khad-i-**n**-ga* (go-1p-NEG-NML:ns) 'we (pi) shall not go'.

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First syllables of verbs follow a very restricted scheme:

C1	V	(C2)
p,t,k; ph,th,kh		p, t, k
m, n, ŋ		m, n, ŋ
l, r, w, y		

C1 can be a glottal stop, which is not written. Some nouns have a C + glide onset, e.g. *cwa* 'water', *kya* 'oil', *swariŋba* 'whistle', but usually a variant with a vowel following the initial consonant is also attested: *cuwa, kea, soariŋba* 'whistle'. As **i** and **u** become glides between C and V, the onset C + glide is very common in second syllables of verbs, e.g. *chep.twettu, rat.tyetti* (cf. progressive and NEG I paradigms). In regard to phonotactics **w** and **y** still behave like vowels in this position, i.e. unlike consonantal **y** and **w** they do not trigger the preconsonantal stem.

yaŋs+u+ett+u	->	yaŋswettu	cf.	o-yaŋ-wat (< yaŋs-)
he is beating on it				broken rice
ratt+i+ett+i	->	rattyetti	cf.	rat-yuk
we are shouting				he will shout

In a handful of nouns, **r** and **ʔ** are attested in syllable-final position: *marci* 'chili', *girgiti* (< git-giti?) 'swallow', *beʔwa* 'duck', *hiduʔwa* 'intestine'. In the last two examples **ʔ** may actually be unreleased **k** (cf. the variants mentioned in 1.1).

Word-final consonants are restricted to unreleased stops and nasals. The ideal syllable is closed. An unreleased stop — especially *k* — is sometimes added to a nominal or particle in order to close the last syllable:

nu-lok	nicely	cf.	*num-lo-na*[1]	salty
sak	who		*sa-ŋa*	who (oblique)
ŋawat	snot		*na + wa*	nose + liquid

Many instances of optional syllable closing *k* can be found with loanwords from Nepali, e.g. *bihani ~ bhyanik* 'morning', *appe ~ appek* 'own', *lauro ~ laurik* 'stick'.

[1] Forms like *saŋa* and *numlona* cannot be accounted for in terms of regular consonant deletion, as *sakŋa or *-lokna do not violate Athpare syllable structure (cf. *sik-na* 'dry', *chik-ŋaʔa* 'I'll pinch you').

Assimilation

A velar nasal suffix is assimilated to a preceding postalveolar or a bilabial:

ŋ -> n /[postalveolar]___
-> m /[bilabial]___

e.g.	khat + ŋaʔa	->	*khatnaʔa*	I will go
	khan + ŋa	->	*khanna*	you (oblique)
	nisum + ŋa	->	*nisumma*	we (pe) will see him

t is optionally assimilated to a preceding velar, while **y** can be realized as **b** after a bilabial:

t -> k / [velar]__ (optional)
y -> b / [bilabial]__ "

e.g.	*khatturŋuŋ ~ khatturkuŋ*	I will bring
	yaŋlemyuk ~ yaŋlembuk	he will beat me/us

Alveolars usually become bilabials before **m**:

[alveolar] -> [bilabial] / ___ m

set + ma	-> *sepma*	(rarely: *setma*)	kill
in + ma	-> *imma*	(rarely: *inma*)	buy

Voicing processes are morphologically conditioned and not predictable on phonological grounds.

Voicing is obligatory for

- stem-final consonants of verbs: /khat + e/ -> *khade* 's/he went',
- postverbs in compound verb constructions: *koma-dhama* 'fall down' (< *thama* 'descend'), *uma jama* 'fry and eat' (< *cama* 'eat'),
- the diminutive suffix /-a + silet/ -> *-ajilet* 'chicken',
- *-ka-* in a reciprocal form: /lem + ka + lem/ -> *lemgalem* 'beating each other'.

No voicing takes place

- after prefixes: *u-tehel* 'his head', *a-ka-pit* 'who spoke to me', *u putuc* 'they gave it' (for a few exceptions see p.80);
- with the nonpast marker: *ŋ tukatu* 'he will bring it';
- with dual and nonsingular: *ni khatace* 'they (D) went', *watet* 'chicken'.

In careful speech I sometimes noticed a voicing in the onset of non-initial syllables. This phenomenon needs further investigation.

thuktwettu	[thukˀ.dwɛtˀ.du]	is cooking
cokwettu	[co.gwɛtˀ.du]	is doing

There is a very weak tendency for vowel assimilation, which can be observed in some noun compounds, like

niŋgirik	umbilical cord
poŋgorok	ant (sp.)
mijaŋgarak	charcoal

The only systematic case of vowel assimilation is the prefix /u-/ (3rd person plural, 3rd person possessive), which is realized as *o* before a mid vowel, as *u* elsewhere.

o-lodue	they told him	*u-khuyue*	they carried it
o-lemsue	they beat him	*u-nisue*	they saw him
		u-khade	they went

However, some speakers tend to generalize *o* and one can also hear *o-khade, o-nisue*.

Insertion

If a suffix vowel follows a stem-final vowel, a glide is usually inserted:

ta + e	-> *taye*	(also: *tae*)	s/he came
si + e	-> *siye*	(also: *sie*)	s/he died
nu + e	-> *nuwe*	(also: *nue*)	s/he became well

Most speakers pronounce the sequence /ŋ + w/ as *ŋgw*:

yuŋgwa	~ *yuŋwa*	is
oyaŋgwat	~ *oyaŋwat*	broken rice
saŋgwa	~ *saŋwa*	buffalo

Deletion

In a sequence of two vowels, the first vowel is elided under certain conditions. This process is again morphologically determined. **i** of the dual/nonsingular suffix *-ci* is elided if followed by the past marker *-e*, the past base marker *-a* is elided before *-u*, *-i* and *-e* (cf. 2.3.1).

a+nis+a+u+ci+e	-> *anisuce*	you (s) saw them
2-see-PB-3U-3nsU-PT		
m+a+nis+a+e	-> *manise*	he saw you (s)
3A-2-see-PB-PT		

A Grammar of Athpare

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